AMENDMENTS TO THE CLAIMS

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

- (Canceled)
- 2. (Currently amended) A compound of the Formula II:

wherein:

RAI and RBI are each independently selected from the group consisting of:

hydrogen,

halogen,

alkyl,

alkenyl,

alkoxv.

alkylthio, and

N(Ra)2:

or when taken together, R_{Al} and R_{Bl} to form a fused aryl ring or heteroaryl ring containing one heteroatom selected from the group consisting of N and S, wherein the aryl or heteroaryl-ring is unsubstituted or substituted by one or more R groups, or substituted by one R₃ group, or substituted by one R₃ group, or substituted by one R₃ group and one R group;

or when taken together, R_{AL} and R_{BL} form a fused 5 to 7 membered saturated ring, optionally containing one heteroatom selected from the group consisting of N and S, and unsubstituted or substituted by one or more R groups;

X is a bond-or a straight or branched chain C_12 alkylene;

X' is $\underline{-(CH_2)_2}$, a straight or branched chain $C_{1,8}$ alkylene optionally substituted with hydroxy, $O(R_{11})$ or one or more halogen atoms wherein the hydroxy, $O(R_{11})$ or one or more halogen atoms are bonded to a carbon atom other than a carbon atom adjacent to a nitrogen atom:

X and X' are further characterized in that the total number of ring carbon atoms contributed by X and X' is 1 to 3;

Y is selected from the group consisting of:

a bond,

-S(O)2-,

 $-S(O)_2-N(R_8)-,$

-C(R₆)-,

- (--0)

-C(R₆)-O-, -C(R₆)-N(R₈)-,

-C(R₆)-N(R₈)-C(R₆)-, and

-C(R₆)-N(R₈)-S(O)₂-:

R₁ is selected from the group consisting of: hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, alkylarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroarylalkylenyl, heteroarylalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, alkylthio, alkanoyl, alkanoyloxy, alkoxycarbonyl, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylthio, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, aikylamino, (dialkylamino), (dialkylamino), alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and

heterocyclyl, oxo, and in the case of aryl, methylenedioxy; further with the proviso that when R_{A1} and R_{B1} , together form a fused benzene ring that is unsubstituted or substituted by $C_{1\rightarrow 1}$ alkyl, $C_{1\rightarrow 2}$ alkoy, or halogen, and Y is a bond, R_{1} is not hydrogen or $C_{1\rightarrow 4}$ alkyl;

R is selected from the group consisting of:

```
halogen,
hydroxy,
alkyl,
alkenyl,
haloalkyl,
alkoxy,
alkylthio, and
-N(R<sub>9</sub>)<sub>2</sub>;
R<sub>3</sub> is selected from the group consisting of:
-Z-R<sub>4</sub>,
-Z-X"-R<sub>4</sub>,
-Z-X"-Y'-R<sub>4</sub>,
```

X" is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkenylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups:

Y' is selected from the group consisting of:

-Z-X"-Y'-X"-Y'-R₄, and -Z-X"-R₅:

```
-S(O)<sub>0-2</sub>-,

-S(O)<sub>2</sub>-N(R<sub>8</sub>)-,

-C(R<sub>6</sub>)-,

-C(R<sub>6</sub>)-O-,

-O-C(R<sub>6</sub>)-,

-O-C(O)-O-,
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$$\begin{array}{c} -N(R_8)\cdot Q\cdot, \\ -C(R_0)\cdot N(R_8)\cdot, \\ -O\cdot C(R_0)\cdot N(R_8)\cdot, \\ -C(R_0)\cdot N(OR_0)\cdot, \\ -R_{10} \\ N\cdot Q - \\ R_{10} \\ R_{7} \\ -N\cdot C(R_0)\cdot N\cdot W - \\ R_{7} \\ -N\cdot C(R_0)\cdot N\cdot W - \\ R_{7} \\ -V\cdot N \\ R_{10} \\ R_{10} \\ \end{array}$$

R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyi, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyan, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

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R₅ is selected from the group consisting of:

$$-\underset{R_{7}}{N}-\underset{C(R_{6})}{C(R_{6})}-\underset{R_{7}}{N}-\underset{R_{7}}{S(O)_{2}}-V-\underset{C(CH_{2})_{a}}{N}\underset{A}{\overbrace{\qquad \qquad }}\underset{A}{\overbrace{\qquad \qquad }}\underset{R_{10}}{\overbrace{\qquad \qquad }}\underset{C(CH_{2})_{a}}{N}-\underset{C(CH_{2})_{a}}{\overbrace{\qquad \qquad }}\underset{A}{\overbrace{\qquad \qquad }}\underset{C(CH_{2})_{b}}{\underbrace{\qquad \qquad \qquad }}\underset{C(CH_{2})_{b}}{\underbrace{\qquad \qquad }}\underset{C$$

R₆ is selected from the group consisting of =O and =S;

R7 is C2-7 alkyene;

R₈ is selected from the group consisting of hydrogen, C₁₋₁₀ alkyl, C₂₋₁₀ alkenyl, C₁₋₁₀ alkoxy-C₁₋₁₀ alkylenyl, and aryl-C₁₋₁₀ alkylenyl;

R₉ is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

R₁₁ is selected from the group consisting of C₁₋₆ alkvl and -Si(C₁₋₆ alkvl)₃;

A is selected from the group consisting of -CH₂-, -O-, -C(O)-, -S(O)₀₋₂-, and N(R₄)-,

Q is selected from the group consisting of a bond, -C(R₆)-, -C(R₆)-, -S(O)₂-,- $C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)$;

V is selected from the group consisting of -C(R₆)-, -O-C(R₆)-, -N(R₈)-C(R₆)-, and -S(O)₂-

W is selected from the group consisting of a bond, -C(O)-, and -S(O)2-; and a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7 ; or a pharmaceutically acceptable salt thereof.

3. (Canceled)

4. (Currently amended) A compound of the Formula IV:

wherein:

X is a bond or a straight or branched chain C12 alkylene;

X' is $\underline{-(CH_2)_2}$, a straight or branched chain C_{1-R} alkylene optionally substituted with hydroxy, $O(R_{1+})$ or one or more halogen atoms wherein the hydroxy, $O(R_{1+})$ or one or more halogen atoms are bonded to a carbon atom other than a carbon atom adjacent to a nitrogen atom:

X and X' are further characterized in that the total number of ring carbon atoms contributed by X and X' is 1 to 3:

Y is selected from the group consisting of:

```
a bond,
-S(O)<sub>2</sub>-,
-S(O)<sub>2</sub>-N(R<sub>8</sub>)-,
-C(R<sub>6</sub>)-O-,
-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
-C(R<sub>6</sub>)-N(R<sub>8</sub>)-C(R<sub>6</sub>)-, and
-C(R<sub>6</sub>)-N(R<sub>8</sub>)-S(O)<sub>2</sub>-;
```

R₁ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkenyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, alkylarylenyl, alkylarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroarylalkylenyl, heteroarylalkylenyl, heteroarylalkylenyl, heteroarylalkylenyl, heteroarylalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, alkylthio, alkanoyl, alkanoyloxy, alkoxycarbonyl, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylthio, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkenyl, and heterocyclyl, oxo, and in the case of aryl, methylenedioxy:

R is selected from the group consisting of:

```
halogen,
hydroxy,
```

```
alkyl,
alkenyl,
haloalkyl,
alkoxy,
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alkylthio, and

N(Ro)2:

R₃ is selected from the group consisting of:

```
-Z-R<sub>4</sub>,

-Z-X"-R<sub>4</sub>,

-Z-X"-Y'-R<sub>4</sub>,

-Z-X"-Y'-X"-Y'-R<sub>4</sub>, and

-Z-X"-R<sub>5</sub>;
```

m is 0 or 1; with the proviso that when m is 1, then n is 0 or 1;

n is an integer from 0 to 4;

X" is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups:

Y' is selected from the group consisting of:

```
-S(O)<sub>0-2</sub>-,

-S(O)<sub>2</sub>-N(R<sub>8</sub>)-,

-C(R<sub>6</sub>)-,

-C(R<sub>6</sub>)-0-,

-O-C(R<sub>6</sub>)-,

-O-C(O)-O-,

-N(R<sub>8</sub>)-Q-,

-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,

-O-C(R<sub>6</sub>)-N(OR<sub>9</sub>)-,

-C(R<sub>6</sub>)-N(OR<sub>9</sub>)-,
```

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} N-Q \\ \\ R_{10} \end{array} \end{array}, \\ -N-C(R_{6})-N-W \\ \\ R_{7} \end{array}, \\ -N-R_{7}-N-Q \\ \\ R_{7} \end{array}, \\ -V-N \\ R_{10} \end{array}, \text{ and} \\ \begin{array}{c} \\ N-C(R_{6})-N \\ \\ R_{10} \end{array}$$

Z is a bond or -O-:

R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroarylalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyan, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R₅ is selected from the group consisting of

$$- \underbrace{N - C(R_6)}_{R_7} - \underbrace{N - S(O)_2}_{R_7} - V - \underbrace{N - C(R_2)_a}_{(CH_2)_b} \underbrace{A}_{and} + \underbrace{N - C(R_6)}_{N-C(R_6)} - \underbrace{N - C(R_6)}_{(CH_2)_b} \underbrace{A}_{and}$$

R₆ is selected from the group consisting of =O and =S;

R7 is C2-7 alkylene;

 R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkylenyl, and aryl- C_{1-10} alkylenyl;

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R₉ is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

R₁₁ is selected from the group consisting of C₁₋₆ alkyl and -Si(C₁₋₆ alkyl)₃;

A is selected from the group consisting of-CH₂-, -O-, -C(O)-, -S(O)₀₋₂-, and N(R₄)-;

Q is selected from the group consisting of a bond, $-C(R_6)$ -, $-C(R_6)$ - $-C(R_6)$ -, $-S(O)_2$ -, $-C(R_6)$ - $N(R_8)$ -W-, $-S(O)_2$ - $N(R_8)$ -, $-C(R_6)$ -O-, and $-C(R_6)$ - $N(OR_6)$;

V is selected from the group consisting of -C(R_6)-, -O-C(O)-, -N(R_8)-C(R_6)-, and -S(O)₂-;

W is selected from the group consisting of a bond, $-C(O)_-$, and $-S(O)_2-$; and a and b are independently integers from 1 to 6 with the proviso that a+b is ≤ 7 ; with the proviso that R, is not hydrogen or $C_{1\!-\!4}$ alkyl when Y is a bond, and: n and m are both 0, or

m is 0, n is 1, and R is selected from the group consisting of $C_{1\text{--}4}$ alkyl, $C_{1\text{--}4}$ alkoxy, and halogen;

or a pharmaceutically acceptable salt thereof.

5. (Currently amended) A compound of the Formula IV:

$$(R)_{n} = \bigvee_{(R_{3})_{m}} \bigvee_{X'} \bigvee_{N-Y-R}$$

wherein:

X is a bond or a straight or branched chain C₁₋₂ alkylene;

X' is -(CH₂)₂- a straight or branched chain C_L alkylene optionally substituted with hydroxy wherein the hydroxy is bonded to a carbon atom other than a carbon atom adjacent a nitrogen atom;

11

X and X' are further characterized in that the total number of ring carbon atoms contributed by X and X' is 1 to 3:

Y is selected from the group consisting of:

```
a bond.
-S(O)2-.
-S(O)_2-N(R_8)-,
-C(R6)-.
-C(R6)-N(R8)-,
-C(R<sub>6</sub>)-N(R<sub>8</sub>)-C(R<sub>6</sub>)-, and
```

-C(R₆)-N(R₈)-S(O)₂-;

R₁ is selected from the group consisting of, hydrogen, alkyl, alkenyl, alkenyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroarvloxyalkylenyl, alkylheteroarvlenyl, and heterocyclyl wherein the alkyl, alkenyl, alkenyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, alkylthio, alkanoyl, alkanoyloxy, alkoxycarbonyl, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyan, aryl, aryloxy, arylthio, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkenyl, and heterocyclyl, oxo, and in the case of aryl, methylenedioxy; further with the proviso that when Y is a bond, R₁ is not hydrogen or C₁₋₄ alkyl;

R is selected from the group consisting of:

```
halogen,
hydroxy,
alkyl,
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alkenyl,
haloalkyl,
alkoxy,
alkylthio, and
-N(R_9)_2;
```

R₃ is selected from the group consisting of:

```
-Z-R<sub>4</sub>,

-Z-X'-R<sub>4</sub>,

-Z-X"-Y'-R<sub>4</sub>,

-Z-X"-Y'-X"-Y'-R<sub>4</sub>, and

-Z-X"-R<sub>5</sub>;
```

m is 0 or 1; with the proviso that when m is 1, then n is 0 or 1;

n is an integer from 0 to 4;

X" is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

```
-S(O)<sub>0-2</sub>-,

-S(O)<sub>2</sub>-N(R<sub>8</sub>)-,

-C(R<sub>6</sub>)-,

-C(R<sub>6</sub>)-,

-O-C(O)-O-,

-N(R<sub>8</sub>)-Q-,

-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,

-O-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,

-C(R<sub>6</sub>)-N(OR<sub>0</sub>)-,
```

$$N-Q$$
 R_{10}
,
 $N-Q$
 R_{10}
,
 $N-Q$
 R_{10}
,
 $N-Q$
 R_{7}
,
 $N-Q$
 R_{7}
,
 $N-Q$
 R_{10}
, and
 $N-C(R_{0})-N$
 R_{10}
, R_{10}

Z is a bond or -O-:

R4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, alkylarylenyl, alkylarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroarylalkylenyl, heteroarylalkylenyl, alkylarylenyl, heteroarylalkylenyl, heteroarylalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyan, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R₅ is selected from the group consisting of

$$- \underbrace{N - C(R_6)}_{R_7} - \underbrace{N - S(O)_2}_{R_7} - V - \underbrace{N - C(R_2)_a}_{(CH_2)_b} \underbrace{A}_{and} + \underbrace{N - C(R_6) - N}_{(CH_2)_a} \underbrace{A}_{(CH_2)_b} \underbrace{A}_{c(CH_2)_b}$$

R₆ is selected from the group consisting of =O and =S;

R₇ is C₂₋₇ alkylene;

 R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkynyl, C_{1-10} alkylenyl, and aryl- C_{1-10} alkylenyl;

R₉ is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

A is selected from the group consisting of-CH₂-, -O-, -C(O)-, -S(O)₀₋₂-, and N(R₄)-;

Q is selected from the group consisting of a bond, $-C(R_6)$ -, $-C(R_6)$ -, $-C(R_6)$ -, $-S(O)_2$ -, $-C(R_6)$ - $N(R_8)$ -W-, $-S(O)_2$ -N(R_8)-, $-C(R_6)$ -O-, and $-C(R_6)$ -N(OR₀):

V is selected from the group consisting of -C(R₆)-, -O-C(R₆)-, -N(R₈)--C(R₆)-, and -S(O)₂-

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2$ -; and a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7 ; or a pharmaceutically acceptable salt thereof.

- 6.-12. (Canceled)
- 13. (Previously presented) A compound or salt of claim 4 wherein m is 0 and n is 0.
- 14. (Canceled)
- 15. (Previously presented) A compound or salt of claim 2 wherein Y is selected from the group consisting of-C(O)-, -S(O)₂-, or -C(O)-NH-, and R_1 is $C_{1:3}$ alkyl.
- 16. (Previously presented) A compound or salt of claim 15 wherein Y is $-S(O)_2$ -, and R_1 is methyl.
- 17.-22. (Canceled)

Reply to Office Action of April 15, 2009

23 (Previously presented) A compound or salt of claim 4 wherein the compound is 9-(methylsulfonyl)-9,10,11,12-tetrahydro-8H-[1,4]diazepino[1',2';1,2]imidazo[4,5-c]quinolin-6amine or a pharmaceutically acceptable salt thereof,

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(Previously presented) A pharmaceutical composition comprising a therapeutically 24. effective amount of a compound or salt of claim 2 in combination with a pharmaceutically acceptable carrier.

25.-27. (Canceled)

- 28 (Previously presented) A compound or salt of claim 4 wherein Y is selected from the group consisting of -C(O)-, -S(O)2-, -C(O)-NH-, and R1 is C1-3 alkyl.
- 29. (Previously presented) A compound or salt of claim 28 wherein Y is -S(O)2, and R₁ is methyl.

30.-33. (Canceled)

34. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 4 in combination with a pharmaceutically acceptable carrier.

35.-39. (Canceled)

- 40. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 23 in combination with a pharmaceutically acceptable carrier.
- 41. (Canceled)